BRIDGING THE COMMUNICATION BARRIER: TECHNIQUES FOR USE WITH NON-VERBAL CLIENTS

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Hello Everyone by Peggy Farlow

Hello everyone on this [Saturday]
It's time for us to start.
I'm glad you are here on this [Saturday]
I mean it from my heart.
Hello to [   ], Hello   (response) *Hello*
Hello to [   ], Hello   (response) *Hello*
Hello to [   ], Hello   (response) *Hello*
Hello to everyone. Hello   (response) *Hello*

Be prepared to give a "Hello" response non-verbally

COMMUNICATION WITH PERSONS WHO ARE NON-VERBAL

low-tech Augmentative & Alternative Communication (AAC) techniques

TITLES of RESEARCH ARTICLES

1. Early sentence productions of 3- and 4-year old children who use augmentative and alternative communication
2. The iconicity of picture communication symbols for children with English additional language and mild intellectual disability
3. Comparison of accuracy and efficiency of directed scanning and group-item scanning for augmentative communication selection techniques with typically developing preschoolers
4. Study of two graphic symbol teaching methods for individuals with physical disabilities and additional learning difficulties
5. Intervention in aphasia using the augmentative and alternative communication
6. Non-verbal communication alternatives for handicapped individuals
7. Teaching young people who are blind and have autism to make requests using a variation on the picture exchange communication system with tactile symbols: A preliminary investigation
8. Toward functional augmentative and alternative communication for students with autism: Manual signs, graphic symbols and voice output communication
9. Examining issues of aided communication display and navigational strategies for young children with developmental disabilities
10. Grammatical issues in graphic symbol communication
11. Picture exchange communication system and pals: A peer-mediated augmentative and alternative communication intervention for minimally verbal preschoolers with autism
12. Developmental memory capacity resources of typical children retrieving picture communication symbols using direct selection and visual linear scanning with fixed communication displays
13. A synthesis of relevant literature on the development of emotional competence: Implications for design of augmentative and alternative communication systems

RESEARCH JOURNALS used to prepare for this presentation

- Journal of Speech, Language, and Hearing Research
- American Journal of Speech-Language Pathology
- Language, Speech and Hearing Services in Schools
- Journal for Developmental Physical Disabilities
- Augmentative and Alternative Communication
- Child Language Teaching and Therapy
- Journal of Rehabilitation
- Journal of Autism Developmental Disorders

Techniques to Communicate with Non-Verbal Clients

- Gestures, American Sign Language (ASL) hand signs and other hand signals
- Low tech communication aides
- High tech communication aides

The success of all communication systems depends on the willingness of the receiver to take time to interact with the non-verbal person.

Non-Verbal Communication Systems

The methods introduced in this presentation will include

- symbol systems
- language boards and
- low-tech communication devices

A.Direct selection technique *(directly select the desired symbol)*

B.Scanning technique *(indirectly select the desired symbol)*

C.Encoding technique *(use multiple signals to indirectly select the desired symbol)*
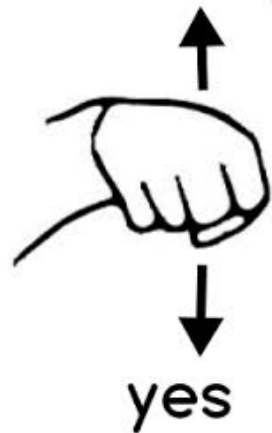
Yes – *No* – *I don't know* signals

- In order to start the communication process, there must be a developed method to indicate *yes*, *no* and *I don't know*.

- It is essential to establish consistent communication signals in order to facilitate future communication

ASL signs

yes

no

I don't know

Developing *Yes – No – I don't know* signals

Find what signals the person is able to use, then establish a signal for each response

Examples

- Glancing up for *yes*, looking to the side for *no* and dropping the head for *I don't know*.
- Looking at right arm of wheelchair for *yes*, left arm of wheelchair for *no* and closing eyes for *I don't know*
- Tapping the desk once for yes, twice for no and a flat palm for I don't know
- Extending arm for *yes*, drawing arm in for *no* and palm toward abdomen for *I don't know*

IMPORTANT:

As the person signals a response, the receiver voices the response to clarify their understanding

Yes/No/I Don't Know *by Peggy Farlow*

1. When you ask me what I want, I know what to say.
If it's something that I like, this is what I say.
I say "Yes, yes, yes - Yes, yes, yes."
"Yes, yes, yes – Yes, yes, yes."

2. When you ask me what I want, I know what to say.
If it's something I don't like, this is what I say.
I say "No, no, no – No, no, no."
"No, no, no – No, no, no."

3. When you ask me what I want and I don't really know.
If I'm not sure what I think, this is what I say.
I say "I don't know, I don't know, I don't know – I don't know, I don't know, I don't know."
"I don't know, I don't know, I don't know – I don't know, I don't know, I don't know."

This is a song to practice *yes/no/I don't know* responses in order to become more consistent

Yes/No/I Don't Know

4. When you ask me a question, watch close for what I say.
Will it be a yes or no? *(I don't know.)* Now tell me what I say.
I say "__ __ __ – __ __ __."
"__ __ __ – __ __ __."

Important procedures to help avoid misunderstandings

Procedures to keep the conversation on the right track
1. find what other signals the person uses
2. provide the person with sufficient time to initiate communication
3. accept only clear non-verbal signals
4. verbally state the response you see to clarify understanding
5. give the person alternatives as responses to questions
6. constantly check each impression of the conversation with the person

Using only "**yes-no**" questions get non-verbal responses from a peer to answer one of the following questions
(20 questions technique)

- In what city or town do your live?
- What is a hobby you enjoy doing?
- What did you eat for lunch?
- What is your favorite animal?
- Where is a favorite place you like to go?

AIDED COMMUNICATION SYSTEM

What is it and why use it?

Aided communication systems

WHAT IS IT? *Aided communication* incorporates devices that are external to the individuals who use them

- – involves the use of symbols (photographs, drawings, letters or words)
- – to be functional, the symbols must be easily understood by both familiar and unfamiliar communication partners

WHY USE IT? The use of communication systems have positive side effects for the client such as

- – decreased rates of problem behaviors
- – increased rates of social interaction
- – development of independence skills

Graphic symbols for communication

- Use of **graphic symbols** can be an effective way of communicating for people with little to no functional speech

- **Learning to communicate** functionally through the use of graphic symbols is an **essential goal** for many non-verbal people

Therapy

help me please | I can do it myself

I need a break | I want to stop
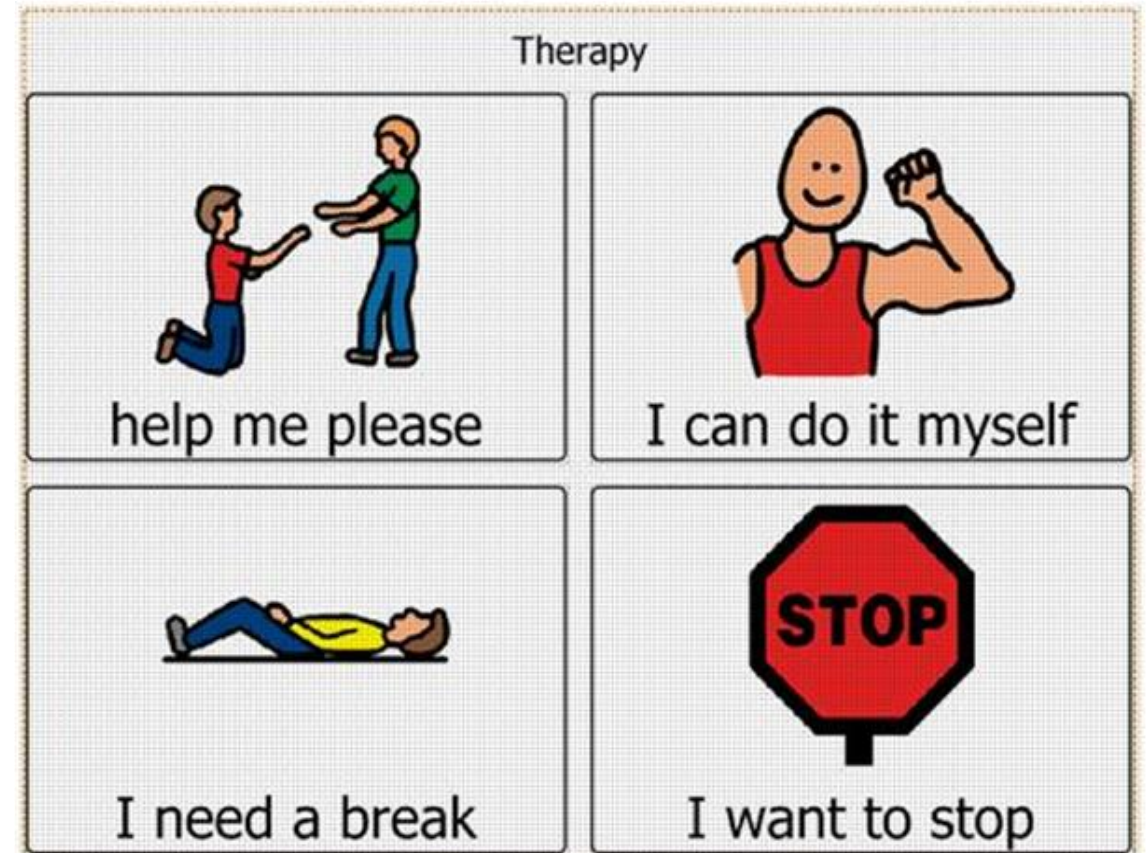
DIRECT SELECTION TECHNIQUE

directly select the desired symbol

Considerations for using Direct Selection Technique

The client must have the following abilities…

1. **<u>selective attention</u>** - ability to attend to visual stimuli and choose a particular graphic symbol from an array with graphic symbols
2. **<u>ability to indicate a response</u>** - response must be accurate and consistent

- The act of selecting a symbol through direct selection will require additional time if individuals have reduced motor abilities.
- The downfall of direct selection is that it requires fine motor control. For this reason, indirect selection methods, such as scanning have been developed.

Direct Selection Technique (one step process)

- Individuals point to graphic symbols by means of a finger, head pointer, wireless mouse, light beam, or eye gaze
- The output message is directly indicated by the message sender
- This technique is the most straightforward & cognitively simple approach to use

pointing

head pointer

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light beam

eye gaze

Low-tech direct selection devices

- Big Mac *($135)*

- GoTalk 4 *($170)*

- GoTalk Button *($15)*

Direct Selection – Beginning Language Boards

- Should include pictures with words
  - as the communicator points to or indicates their picture choice, *the receiver says the word out loud*
- Should include pictures of things and activities occurring in the person's environment
- The language board should also allow the communicator to convey both positive and negative feelings

Beginning language boards are useful in communicating concrete concepts

BEGINNING LANGUAGE BOARDS
Choice Boards with 3 – 4 – 6 – 9 or 12 choices

PICTURE DISPLAY EXAMPLES

PERMANENT OR CHANGEABLE BOARDS

(fixed or dynamic displays)

Intermediate/Advanced Language Boards

- Add more words and choices
- May include colors and numbers
- Uses the alphabet
- Begins to use more words and fade out pictures

Intermediate language boards allow for more expressive communication
Advanced language boards help to communicate more abstract concepts

Using only non-verbal signals, practice asking and answering one of the following questions.

1. What do you want to do next time we get a break?
2. What day will you be leaving the conference?
3. What client population do you work with?

SCANNING TECHNIQUE

indirectly select the desired symbol

Scanning Technique – indirect selection

- A selection technique for individuals who cannot point to graphic symbols.
- Indirect selection requires an intermediate step to select an item from the selection set.
- Communication symbols are presented one at a time so the person can indicate his/her response when a specific symbol is reached.

High Tech Scanning Devices

High-Tech Dynamic Devices

Scanning Technique (several step process)

- During scanning, individuals can reduce the number of motor movements required to access graphic symbols
  - **High Tech:** by stopping an electronic cursor that navigates auditorally, visually, or both, through a range of symbols on an aided communication system. The electronic cursor is usually stopped by switch activation
  - **Low Tech:** by indicating to the person receiving the message to stop on a specific category and then scanning that page for a specific response
- Scanning is a slow technique and requires the constant attention of the person receiving the message

Low-tech Scanning Technique (9 choices)
Three row (tic-tac-toe) formation

- For people who cannot point
- Indicate rows, then columns
    - Move head up or down to indicate the row
    - Move head side to side to indicate the column
- The person first indicates a choice by signaling the row *(with the receiver verbally identifying the choice)* and then asking the person to indicate which column using either side to side head movements or by responding to yes/no questions from the receiver.

(81 choices)

The three by three format could later be expanded to nine boxes with 9 options in each box.

PERSON	PLACE	THING

LEISURE	FOOD	EVENT

EMOTION	ANIMAL	ACTION

CATEGORY CHOICES

People		Places
	Things I'm Thankful for	
Foods		Activities

Name three things that you are thankful for

(with linked pages)

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PEOPLE

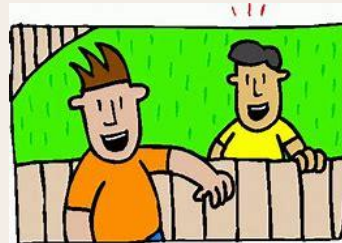| Mom	Dad	Brother
Sister	Friend	Teacher
Therapist	Neighbor	Doctor

(linked page for *Things I'm Thankful for*)

not on this page

Things I'm Thankful For by Hap Palmer

There are many *[things]** I am thankful for
I can find them near and far.
There are many *[things]** I am thankful for,
Let me tell you what they are.
I'm thankful for _____.
I'm thankful for _____.
I'm thankful for _____.
And I'm thankful to be me.

[people, places, foods, activities, etc.]

Time to practice using either the head movement or scanning technique to indicate a response on a three row grid communication device

ENCODING TECHNIQUES

use multiple signals to indirectly select the desired symbol

Encoding Technique (multiple signals to indirectly select symbol)

- Encoding is used to decrease selection time or to increase the number of items in the selection set
- For people who cannot point but have good cognitive and memorization skills
- The user gives multiple signals to specify the correct item from the users selection vocabulary
- Low tech encoding methods are generally implemented in two ways:
  1. **Memory-based encoding**
  2. **Chart-based encoding**
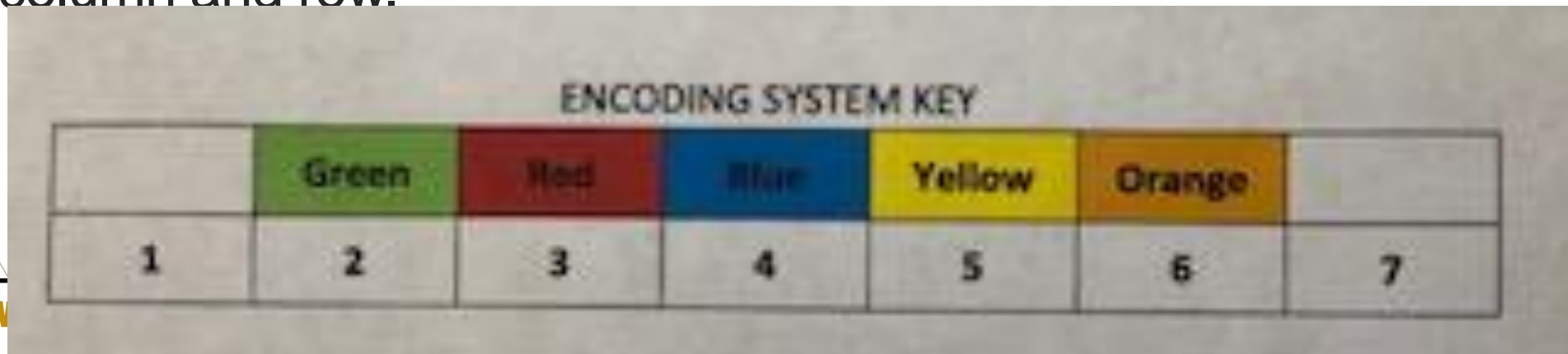
Encoding Technique

- The desired category is indicated by a pattern or code of input signals.
- The code or pattern of communication must be memorized or referred to on a chart.
- Example
  - indicate column by color
  - Indicate row by number

	GREETINGS	GOODBYES	QUESTIONS	COMMENTS	FEELINGS
1	Hi!	Goodbye.	What's your name?	I like that.	I'm feeling great.
2	Hey!	See you later!	Where do you live?	I don't like that.	I'm a little tired.
3	How have you been?	I hope to see you again soon.	Who do you live with?	I am not sure/I don't know.	I'm hungry.
4	What's up?	It was nice meeting you!	Where do you work?	I want to play something.	I'm feeling sick.
5	How are things?	It was great spending time with you!	When's your birthday?	Thank you for your help.	I'm feeling silly!
6	How's your day?	I'm really going to miss you.	What's your favorite type of music?	I need your help with something.	I'm feeling confused.
7	Good to see you.	I've got to go now.	Do you have any pets?	I need to take a break.	I'm feeling angry/frustrated.

Considerations for Encoding

- Encoding places demands on working memory
- An encoding system requires two movements. Columns are color coded and rows are numbered.
  - The person can look at the colored codes on the board to indicate the column and then at the number line to indicate the row of the desired communication element.
- As the vocabulary increases, additional language pages can be developed and labeled by content area and page number. The person can then indicate the page he wishes to be placed on the board and then indicate the column and row.

ENCODING SYSTEM KEY

	Green	Red	Blue	Yellow	Orange	
1	2	3	4	5	6	7

ETRAN – stands for *eye transfer*

- A communication system which enables people to select items with their eyes.
- It is made of plexiglass and can be viewed by both the communicator and the receiver.
- The communicator indicates his message through a series of eye and head movements.

https://www.youtube.com/watch?v=xatHPazOXw0

ETRAN example using sheet protectors

PHRASES

	GREETINGS	GOODBYES	QUESTIONS	COMMENTS	FEELINGS
1	Hi!	Goodbye.	What's your name?	I like that.	I'm feeling great.
2	Hey!	See you later!	Where do you live?	I don't like that.	I'm a little tired.
3	How have you been?	I hope to see you again soon.	Who do you live with?	I am not sure/I don't know.	I'm hungry.
4	What's up?	It was nice meeting you!	Where do you work?	I want to play something.	I'm feeling sick.
5	How are things?	It was great spending time with you!	When's your birthday?	Thank you for your help.	I'm feeling silly!
6	How's your day?	I'm really going to miss you.	What's your favorite type of music?	I need your help with something.	I'm feeling confused.
7	Good to see you.	I've got to go now.	Do you have any pets?	I need to take a break.	I'm feeling angry/ frustrated.

example of encoding chart
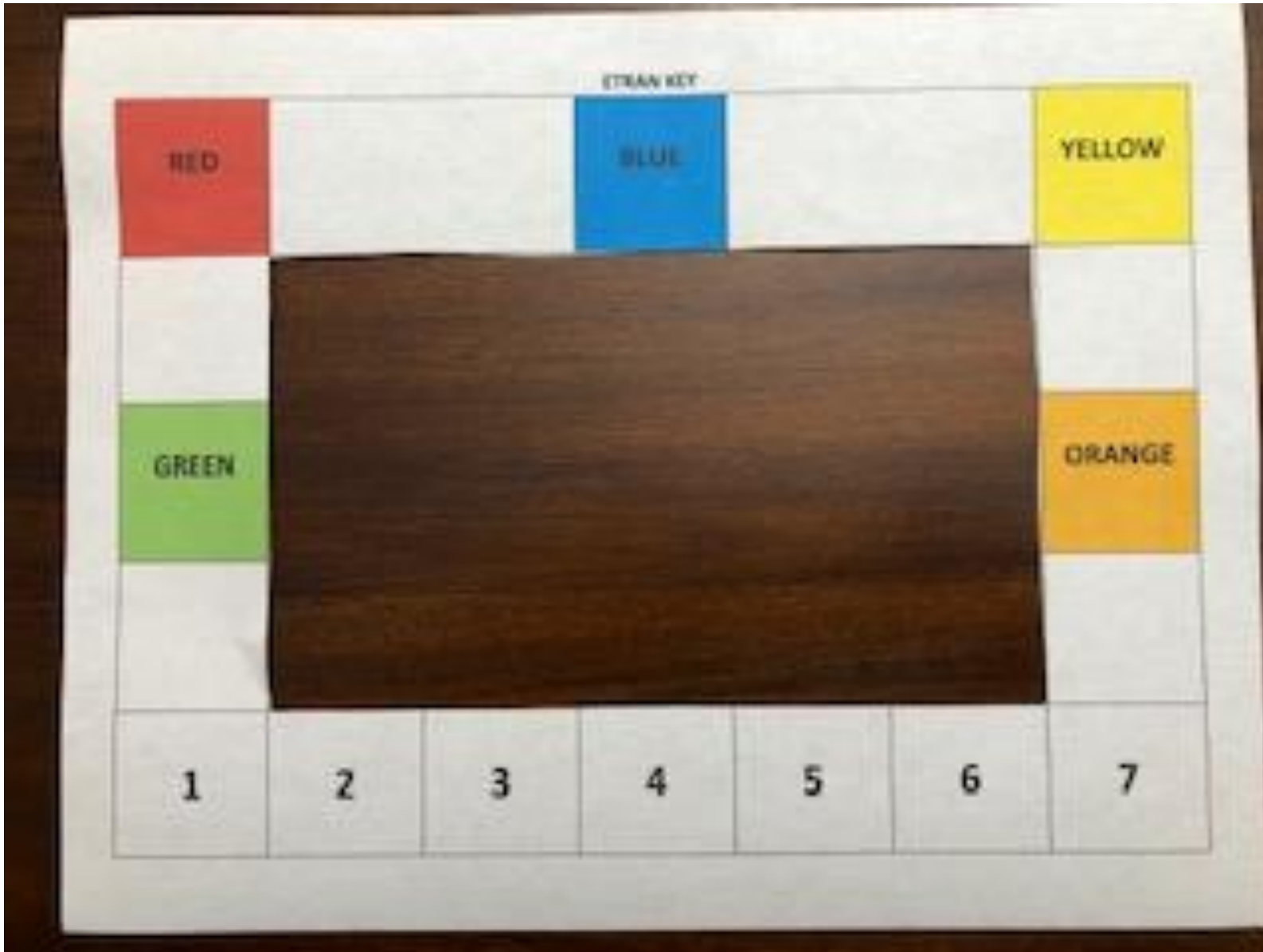
using eye gaze and encoded communication system

Practice asking and answering questions with a peer.

Review of Communication Techniques

1. Establish consistent "yes – no – I don't know" signals
2. Verbally state the response you see to clarify understanding
3. Determine most appropriate communication technique to use
   - **Direct Selection** Technique
     - directly select the desired symbol
   - **Scanning** Technique
     - indirectly select the desired symbol
   - **Encoding** Technique
     - use multiple signals to indirectly select the desired symbol

Bridging the Communication Barrier: Techniques for Use with Non-Verbal Clients

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